What is claimed is:

1. A limited play optical storage medium for data, comprising:

a reflective layer;

a control portion comprising an optically transparent polymeric resin and a light absorbing material, wherein the control portion has a light transmission of greater than or equal to about 70% at 650 nm, a curing index of greater than or equal to about 0.1 and a filtration index of greater than or equal to about 2.5, and wherein the light absorbing material has a minimum extinction coefficient (measured in CH_2Cl_2 solution) at 600 nm of greater than or equal to 1,500 $mol^{-1} \cdot cm^{-1} \cdot L$, a maximum extinction coefficient (measured in CH_2Cl_2 solution) at 650 nm of less than about 1,000 $mol^{-1} \cdot cm^{-1} \cdot L$, a ratio of extinction coefficient at 650 nm to 600 nm less than about 0.1; and

a reactive layer disposed between the reflective layer and the control portion, wherein the reactive layer is designed to limit the time during which data on the medium (disposed on a side of the reactive layer opposite the control portion), can be accessed after exposure to oxygen.

2. The storage medium of Claim 1, further comprising a substrate is disposed on a side of the reflective layer opposite the control portion.

3. The storage medium of Claim 2, wherein the control portion has at least one of an absorbance ratio at (600 nm to 365 nm) or an absorbance ratio at (600 nm to 400 nm) of greater than or equal to about 2.

4. The storage medium of Claim 3, wherein the control portion has at least one of an absorbance ratio at (600 nm to 365 nm) or an absorbance ratio at (600 nm to 400 nm) is greater than or equal to about 5.

5. The storage medium of Claim 2, further comprising a semi-reflective layer disposed between the reflective layer and the control portion.

6. The storage medium of Claim 5, wherein the reactive layer is disposed between the semi-reflective layer and the reflective layer.

7. The storage medium of Claim 6, further comprising another reactive layer disposed between the semi-reflective layer and the control portion.

8. The storage medium of Claim 1, wherein the light absorbing material has at least one of an absorbance ratio at (600 nm to 365 nm) or (600 nm to 400 nm) of greater than or equal to about 5.

9. The storage medium of Claim 8, wherein at least one of an absorbance ratio at (600 nm to 365 nm) or (600 nm to 400 nm) is greater than or equal to about 10.

10. The storage medium of Claim 1, further comprising a data layer disposed on a side of the reactive layer opposite the control portion.

11. The storage medium of Claim 1, wherein the reactive layer further comprises a carrier, a reactive material and a polyhydroxy compound.

12. The storage medium of Claim 1, wherein the polymeric resin comprises polycarbonate.

13. The storage medium of Claim 1, wherein the medium, when the reactive layer has been oxidized, has the property of being unplayable after greater than or equal to about 20 hrs of accelerated weathering.

14. The storage medium of Claim 13, wherein the medium, when the reactive layer has been oxidized, has the property of being unplayable after greater than or equal to about 40 hrs of accelerated weathering.

15. The storage medium of Claim 14, wherein the medium, when the reactive layer has been oxidized, has the property of being unplayable after greater than or equal to about 80 hrs of accelerated weathering.

16. The storage medium of Claim 1, wherein the light absorbing material is present in an amount of about 0.01 wt% to about 1 wt%, based upon the total weight of the control portion.

17. The storage medium of Claim 16, wherein the light absorbing material is present in an amount of about 0.1 wt% to about 0.40 wt%, based upon the total weight of the control portion.

18. The storage medium of Claim 1, wherein the control portion has a filtration index greater than or equal to about 4.0.

19. The storage medium of Claim 18, wherein the control portion has a filtration index greater than or equal to about 6.

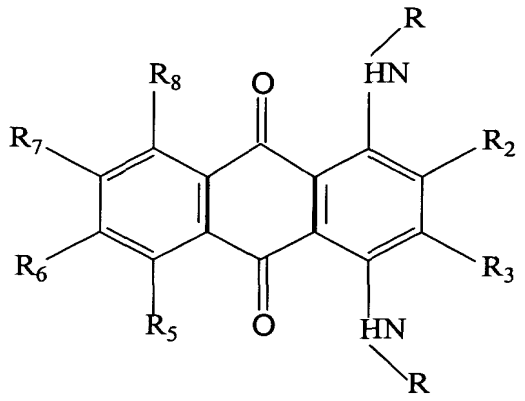
20. The storage medium of Claim 18, wherein the control portion has a curing index greater than or equal to about 0.5.

21. The storage medium of Claim 1, wherein the control portion has a curing index greater than or equal to about 0.5.

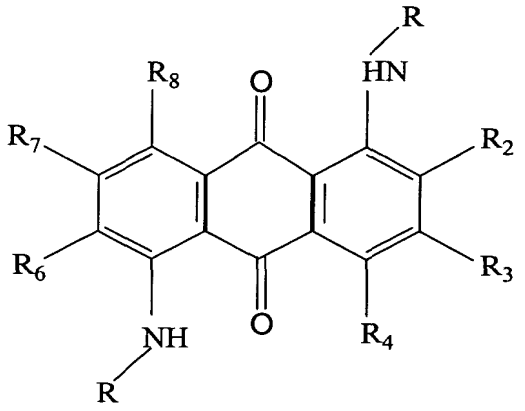
22. The storage medium of Claim 21, wherein the control portion has a curing index greater than or equal to about 5.

23. The storage medium of Claim 1, wherein the light absorbing material is selected from the group consisting of an anthraquinone derivative, a benzopyran derivative, a vat violet dye, and combinations comprising at least one of these light absorbing materials.

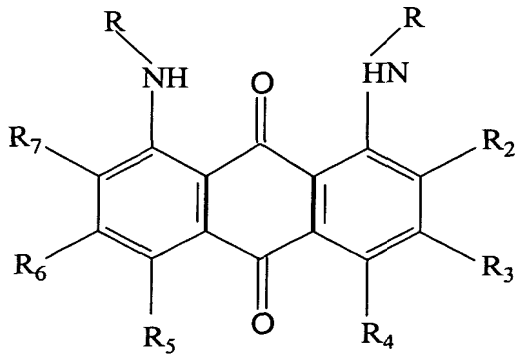
24. The storage medium of Claim 23, wherein the light absorbing material comprises the anthraquinone derivative selected from the group consisting of 1,4-, 1,5- and 1,8-anthraquinone derivatives, and a combination comprising at least one of the foregoing anthraquinone derivatives, having a Formula (IX), (X) and (XI) respectively



(IX)



(X)



(XI)

wherein R_1 - R_7 are, individually, selected from the group consisting of a hydrogen atom, a hydroxyl group, an aliphatic group, an aromatic group, a heterocyclic group, a halogen atom, a cyano group, a nitro group, --COR_9, --$COOR_9$, --NR_9R_{10}, --$NR_{10}COR_{11}$, --$NR_{10}SO_2R_{11}$, --$CONR_9R_{10}$, --$CONHSO_2R_{11}$, and --SO_2NHCOR_{11}; in which R_9 and R_{10} are, individually, selected from the group consisting of a hydrogen atom, an aliphatic group, an aromatic group, and a heterocyclic group; wherein R_{11} is selected from the group consisting of an aliphatic group, an aromatic group, and a heterocyclic group; and wherein R is selected from the group consisting of hydrogen, an alkyl group containing 1 to 20 carbon atoms, a cycloalkyl group containing 3 to 20 carbon atoms, an allyl group containing 3 to 20 carbon atoms, a hydroxyl group, a cyano group, a nitro group, a carboxylic acid, an aryl group containing 6 to 10 carbon atoms, an amino group containing less than or equal to 20 carbon atoms, an amido group containing 1 to 20 carbon atoms, a carbamoyl group containing 1 to 20 carbon atoms, an ester group containing 2 to 20 carbon atoms, an alkoxy or aryloxy group containing 1 to 20 carbon atoms, a sulfonamido group containing 1 to 20 carbon atoms, a sulfamoyl group containing less than or equal to 20 atoms, a 5- membered heterocyclic ring, and a 6- membered heterocyclic ring.

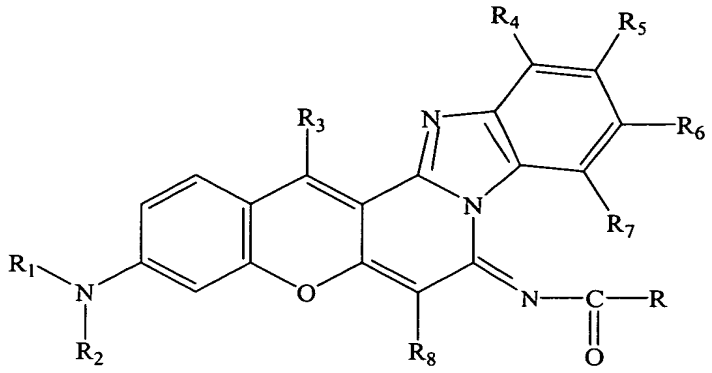
25. The storage medium of Claim 24, wherein the light absorbing material comprises the 1,8-anthraquinone derivatives having the Formula (XI).

26. The storage medium of Claim 25, wherein the light absorbing material comprises 1,8 bis(cyclohexylamino) anthraquinone.

27. The storage medium of Claim 25, wherein the light absorbing material comprises 1,8-dialkylamino anthraquinone.

28. The storage medium of Claim 25, wherein the light absorbing material is present in an amount of about 0.1 wt% to about 0.4 wt%, based upon the total weight of the control portion.

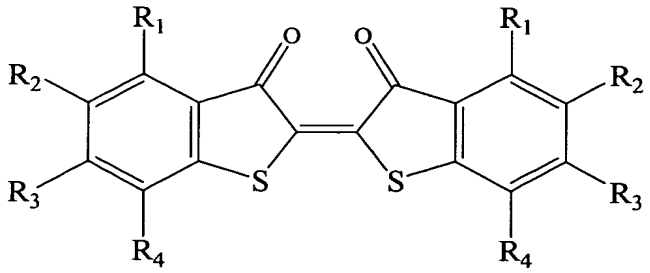
29. The storage medium of Claim 23, wherein the light absorbing material comprises the benzopyran derivative having a Formula (XII)



(XII)

where R is an unsubstituted or substituted aryl group, R_8 is selected from the group consisting of alkoxycarbonyl, nitro, cyano, alkylsulfonyl, benzimidazolyl, benzothiazolyl, benzoxazolyl, or quinoxalinyl; R_1 and R_2 are, independently selected from the group consisting of hydrogen, unsubstituted or substituted alkyl groups, wherein the substitution is selected from the group consisting of C_1-C_{15} monovalent hydrocarbyl, alkoxy, cyano, halo,carboxyl, and carbalkoxy.

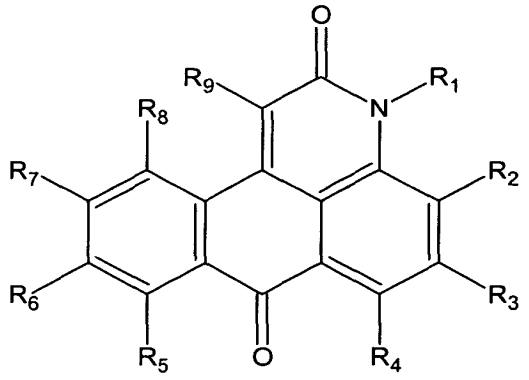
30. The storage medium of Claim 23, wherein the light absorbing material comprises the vat violet dye having the Formula (XIV)



(XIV)

where R_1, R_2, R_3 and R_4, are, individually, selected from the group consisting of hydrogen, halogen, alkyl, aryl, alkoxy, alcoyl, amide, alcohol, nitrile, nitro, ester, and ether.

31. The storage medium of Claim 23, wherein the anthraquinone derivative of Formula (XV)



(XV)

wherein R_1 is selected from the group consisting of hydrogen, an aliphatic group, an aromatic group, and a heterocyclic group; R_2, R_3, R_4, R_5, R_6, R_7, R_8, and R_9 are, individually, selected from the group consisting of hydrogen, an alkyl group having 1 to 20 carbon atoms, a cycloalkyl group having 3 to 20 carbon atoms, an allyl group having 3 to 20 carbon atoms, a hydroxyl group, a cyano group, a nitro group, a carboxylic acid, an aryl group having 6 to 10 carbon atoms, an amino group having less than or equal to 20 carbon atoms, an amido group having 1 to 20 carbon atoms, a carbamoyl group having 1 to 20 carbon atoms, an ester group having 2 to 20 carbon atoms, an alkoxy or aryloxy group having 1 to 20 carbon atoms, a sulfide group having 1 to 20 carbon atoms, a sulfonamido group having 1 to 20 carbon atoms, a sulfamoyl group having less than or equal to 20 atoms, a 5- membered heterocyclic ring, and a 6- membered heterocyclic ring; and wherein at least one group of R_1 R_2, R_3, R_4, R_5, R_6, R_7, R_8, and R_9 is different from a hydrogen atom.

32. The storage medium of Claim 31, wherein the light absorbing material is present in an amount of about 0.1 wt% to about 0.4 wt%, based upon the total weight of the control portion.

33. The storage medium Claim 1, wherein the control portion has a transmissivity of less than or equal to about 0.1% at a wavelength of 550 nm.

34. The storage medium Claim 1, wherein the storage medium is a DVD.

35. The storage medium Claim 1, further comprising another control portion disposed on a side of the reflective layer opposite the reactive layer.

36. A method for manufacturing a limited play optical storage medium, comprising:

combining a polymeric resin and a light absorbing material to form a control composition;

forming the control composition into a control portion having a light transmission of greater than or equal to about 70% at 650 nm, a curing index of greater than or equal to about 0.1 and a filtration index of greater than or equal to about 2.5, and wherein the light absorbing material has a minimum extinction coefficient (measured in CH_2Cl_2 solution) at 600 nm of greater than or equal to 1,500 $mol^{-1} \cdot cm^{-1} \cdot L$, a maximum extinction coefficient (measured in CH_2Cl_2 solution) at 650 nm of less than about 1,000 $mol^{-1} \cdot cm^{-1} \cdot L$, a ratio of extinction coefficient at 650 nm to 600 nm less than about 0.1; and

disposing a reflective layer and a reactive layer on a side of the control portion wherein the reactive layer is disposed between the control portion and the reflective layer, and wherein the reactive layer is designed to limit the time during which data on the medium (disposed on a side of the reactive layer opposite the control portion) can be accessed after exposure to oxygen.

37. The method of Claim 36, further comprising disposing a substrate on a side of the reflective layer opposite the control portion.

38. The method of Claim 37, further comprising disposing a semi-reflective layer between the reflective layer and the control portion.

39. The method of Claim 37, further comprising disposing the reactive layer between the semi-reflective layer and the reflective layer.

40. The method of Claim 39, further comprising disposing another reactive layer between the semi-reflective layer and the control portion.

41. The method of Claim 36, further comprising disposing data on a side of a control portion opposite the reactive layer.

42. A limited play optical storage medium for data, comprising:

a reflective layer;

a control portion comprising an optically transparent polymeric resin and a light absorbing material, wherein the control portion has a light transmission of greater than or equal to about 70% at 650 nm initially, wherein the light transmission decreases from the initial light transmission at 650 nm, after 160 hrs accelerated weathering, by greater than or equal to about 5%; and

a reactive layer disposed between the reflective layer and the control portion, wherein the reactive layer is designed to limit the time during which data on the medium (disposed on a side of the reactive layer opposite the control portion), can be accessed after exposure to oxygen.

43. The storage medium of Claim 42, wherein the light transmission decreases after 160 hours of accelerated weathering of greater than or equal to about 10%.

44. The storage medium of Claim 42, wherein the light transmission decreases after 80 hours of accelerated weathering of greater than or equal to about 2%.

45. The storage medium of Claim 44, wherein the light transmission decreases after 80 hours of accelerated weathering of greater than or equal to about 5%.

46. The storage medium of Claim 45, wherein the light transmission decreases after 80 hours of accelerated weathering of greater than or equal to about 10%.